

Science Toolkit: Grade 7 Objective 4.A.1.e

Student Handout: Science: Grade 7 Objective 4.A.1.e

Standard 4.0 Chemistry

Topic A. Structure of Matter

Indicator 1. Cite evidence to support the fact that all matter is made up of atoms, which are far too small to see directly through a microscope.

Objective e. Cite evidence to explain that all living and non-living things can be broken down into elements.

Selected Response (SR) Item

Question

Use the information below to answer the following.

Cotton is a plant product used to make fabric. Cotton is made of cellulose, a fiber not digestible by humans. Cellulose is composed of many sugar molecules bonded together into long chains. Each sugar molecule contains carbon, hydrogen, and oxygen atoms.

When cotton fabric is washed, wrinkles often form. The clothing industry uses chemicals to manufacture some cotton fabrics that are wrinkle-free. Dyes are also added to color the cellulose fibers in cotton.

A feature that is common to both cellulose and sugar is that both are

- A. magnetic
- B. elements
- C. compounds
- D. soluble in water

Correct Answer

C. compounds

Question

Use the information below to answer the following.

Cotton is a plant product used to make fabric. Cotton is made of cellulose, a fiber not digestible by humans. Cellulose is composed of many sugar molecules bonded together into long chains. Each sugar molecule contains carbon, hydrogen, and oxygen atoms.

When cotton fabric is washed, wrinkles often form. The clothing industry uses chemicals to manufacture some cotton fabrics that are wrinkle-free. Dyes are also added to color the cellulose fibers in cotton.

A feature that is common to both cellulose and sugar is that both are

- A. magnetic
- B. elements
- C. compounds
- D. soluble in water